201
HW 6.3

P376-377 3, 6-12, 19, 20, 23-26

3. $\angle A \cong \angle L$ $\quad \frac{AB}{LM} = \frac{BC}{MN} = \frac{AC}{LN}$

$\angle B \cong \angle M$

$\angle C \cong \angle N$

6. D

7. angles ✓ yes $RSTU \sim WXZY$

$\frac{64}{32} = \frac{48}{24}$ ✓ SF 2:1

8. angles ✓ $\frac{5}{4} = \frac{10}{8} = \frac{12}{9.6}$ S.F. 5:4

1.25 1.25 1.25 ✓ $\triangle CDE \sim \triangle TUV$

9. 5:2

10. $\frac{5}{2} = \frac{x}{11}$ $\quad \frac{5}{2} = \frac{30}{y}$ $\quad z = 65°$

$x = 27.5$ $\quad y = 12$

11. $p = 85$ units

$p = 34$ units

12. $\frac{5}{3} = \frac{60}{p}$ (12)

$36 in = p$

19. $\frac{x}{16} = \frac{27}{18}$ (8, 2)

$x = 24$

alt. int. $\angle$s

20. $\frac{y-1}{16} = \frac{y}{18}$ (8, 9)

$8y = 9y - 9$

$-y \quad -9$

$y = 9$ median

23. $\frac{9}{19\frac{4}{5}} = \frac{9}{\frac{99}{5}}$ $9 \cdot \frac{5}{99} = \left(\frac{5}{11}\right)$

24. $\frac{5}{11} = \frac{10\frac{2}{5}}{AC}$ $AC = 22\frac{22}{25}$

$\frac{5}{11} = \frac{ED}{22}$ $ED = 10$

25. $\frac{5}{11} = \frac{8}{a}$ $5a = 88$

$a = 17\frac{3}{5}$

26. $\triangle DEF$ $\triangle ABC$

$A = \frac{1}{2} 8 \left(10\frac{2}{5}\right)$ $A = \frac{1}{2}\left(17\frac{3}{5}\right)\left(22\frac{22}{25}\right)$

$= 41.6\ u^2$ $17.6 \quad 22.88$

$201.344\ u^2$

Compare $\frac{41.6}{201.344} = \frac{25}{121}$

Scale Factor $\frac{5}{11}$ Ratio of Area $\frac{25}{121}$

Any observations?